AMENDED CLAIMS:

1-6 (Cancelled)

7. (Currently Amended) A catalyst suitable for the hydroalkylation of an aromatic hydrocarbon comprising

(a) a first metal having hydrogenation activity and selected from palladium, ruthenium, nickel, or cobalt;

(b) a second metal, different from the first metal, selected from zinc, tin, nickel or cobalt; and

(c) a crystalline inorganic oxide material having an X-ray diffraction pattern including the following d-spacing maxima 12.4±0.25, 6.9±0.15, 3.57±0.07 and 3.42±0.07, wherein the crystalline inorganic material excludes MCM-22.

8. (Currently Amended) The catalyst of claim 7 wherein the crystalline inorganic oxide material is selected from ~~MCM-22~~, PSH-3, SSZ-25, MCM-36, MCM-49 and MCM-56.

9-10 (Cancelled)

11. (Previously Presented) A catalyst suitable for the hydroalkylation of an aromatic hydrocarbon comprising:

ruthenium;

tin; and

a crystalline inorganic oxide material having an X-ray diffraction pattern including the following d-spacing maxima 12.4±0.25, 6.9±0.15, 3.57±0.07 and 3.42±0.07, wherein the crystalline inorganic oxide material is selected from PSH-3, SSZ-25, MCM-36, MCM-49 or MCM-56.

12. (New) A catalyst suitable for the hydroalkylation of an aromatic hydrocarbon comprising

(a) a first metal having hydrogenation activity and selected from palladium, ruthenium, nickel, or cobalt;

(b) a second metal, different from the first metal, selected from zinc, tin, nickel or cobalt; and

(c) a crystalline inorganic oxide material having an X-ray diffraction pattern including the following d-spacing maxima 12.4±0.25, 6.9±0.15, 3.57±0.07 and 3.42±0.07, wherein the crystalline inorganic oxide material is selected from PSH-3, SSZ-25, MCM-36, MCM-49 or MCM-56.